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ABSTRACT

Theories or explanations of educational evaluation are discussed and categorized under two broad methodological headings, the objectivist and subjectivist epistemological orientations. They can be seen as potentially complementary empirical approaches that offer evaluators two methodological orientations to assess educational-reform outcomes. Whereas the objectivist orientation has as its model "justice-as-fairness," the subjectivist orientation offers the following eight major evaluation models: (1) systems analysis; (2) behavioral objectives; (3) decision making; (4) goal free; (5) art criticism; (6) accreditation; (7) adversary; and (8) transaction. With the possibility of multiple ideological and methodological approaches, evaluators must make at least three basic choices between the equilibrium and conflict social-change paradigms, theoretical frameworks within each of the social-reform paradigms, and the positivist and phenomonological research paradigms. Under certain conditions, one rather than the other theory or theories might offer more useful and compelling data and explanations, and thus present a more rational choice to the evaluation of educational reform. Educational decisionmakers, planners, and evaluators should be aware of the entire range of ideological and methodological perspectives on evaluation if they are to make well-informed, intelligent choices. (RL)

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MULTIPLE APPROACHES TO THE EVALUATION OF EDUCATIONAL REFORM: FROM COST-BENEFIT TO POWER-BENEFIT ANALYSIS

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> The outcome of any serious research can only be to make two questions grow where one question grew before.
>
> Thorstein Veblen

1. Are Alternative Evaluation Approaches Needed?

How are we to evaluate or assess attempts to reform or change educational systems? What is the spectrum of theory from which we may choose causal models to frame evaluation assumptions concerning appropriate standards, knowledge needs, methods, and analytical techniques?

In this paper, I argue that educational evaluation--be it at the local or national system level--should be useful for both theory and practice. Traditionally, educational evaluation has been rather narrowly viewed as a problem of technical rationality, as positivistic inquiry into the fit between ends and means. While approaches grounded in this orientation will no doubt continue to predominate in evaluation research, it has nevertheless become increasingly evident that policy makers require not only technical information but a broader understanding of the entire range of theoretical approaches potentially useful in the framing of evaluation questions and the choice of evaluation methods (Abt, 1977; Bolan, 1975; Coleman, 1973; Hodges and Sheehan, 1978; House, 1979; Sejersted, 1978; Werts and Lynn, 1969). We need to recognize that all social theory and reform efforts start with normative notions, or stipulations, about the nature of man, about society and the relation between man and society. By making these initial stipulations explicit and by discussing the social relevance of various social-change and evaluation theories, we will, as Israel (1972) argues, gain a greater degree of fruitful "cognitive dissonance" than is possible when using strictly positivistic approaches.

With the seeming inability of liberal school reformers to adequately explain their reform failures, a number of competing explanations from conflict perspectives have emerged (Carnoy and Levin, 1976; Kallos and Lundgren, 1977; Karier, 1973 and 1974; H. M. Levin, 1977). It is, I believe, imperative that all those involved in planning, implementing and evaluating educational-reform efforts also be aware of this controversy. Certainly technical knowledge will continue to hold a high priority. But given the ongoing paradigm clash in explanations of why and how changes in educational systems take place, it now becomes imperative to supplement technical information from the assessment of educational-change efforts with an understanding of relations between ideology and theory choice, with a more sophisticated understanding of how dif erent views of social reality and social change logically lead to predictable linked assumptions about appropriate goals, treatments, and evaluation models for educational reform (Paulston, 1977; Touraine, 1977; Vallance, 1972).

In light of this continuing need, my aims here will be: (1) to delineate the range of theoretical approaches to the evaluation of educational reform present in the international literature and to indicate how evaluation models might be grouped as to value and epistemological assumptions, methods, etc.; (2) to demonstrate how evaluation theories, or causal models, might be more usefully grouped within a variety of distinct paradigmatic orientations; and (3) to indicate something of recent comparative and dialectical approaches to the evaluation of reform efforts. These efforts, as we shall see, have important implications for both the methodology of educational evaluation and for a more powerful theoretical explanation of the conditions under which educational reform efforts at either the local, regional, or national level will be more or less successful.

In a paraphrase of the introductory quotation, this paper may be seen to advocate evaluation research that will not only provide useful information for planners and decision-makers, but will also seek to foster the growth of two explanatory models where only one existed before. Now the proliferation of models clearly has advantages and disadvantages for all those involved in educational-reform efforts, and I will mention several.

As all evaluation, and especially the evaluation of educational-reform efforts that influence the life chances of students, involves the use of models, or simplified views of the nature of man, of social reality, and of social verification, the question is not simply if multiple models should be used. They are, in fact, widely used. Rather, the issue is the degree to which models should be made explicit and be allowed to compete as options. From an examination of past efforts to apply theoretical models to evaluation, a rationale and a number of lessons can be presented (Murphy, 1977). One lesson is that the use of alternative models facilitate a more comprehensive understanding of how reform and evaluation decisions are made and implemented. When the assumptions of various conceptual frameworks are juxtaposed, school reformers are in a better position to identify important questions that may be ignored or overlooked. Conflicting models suggest alternative explanations of "what went wrong" in choosing reform goals, rationales and programs. They provide a more complex understanding of how the use of different lenses to view the same problem suggest quite different reform goals and strategies for evaluation (H. M. Levin, 1977).

A second lesson is that the recognition of conflicting models adds considerably to the difficulty and complexity of evaluation research. The evaluator must explain not only his grounds for the choice of one approach rather than another, but also indicate some awareness of the advantages and disadvantages of the model chosen. Where use of two approaches representing diametrically opposed world views or methodological standards are chosen to assess the same reform effort, the need for a balanced assessment of each approach makes objectivity demands that few social scientists or planners can meet (Trend, 1978).

A third lesson might also be mentioned. While it is often assumed that reform and evaluation are rational and flexible processes, a close examination of these phenomena indicate that individual value preferences predominate (Lundgren, 1978; McGinn, 1979). Policy makers and evaluators favor models that reflect their perceptions of educational problems and the most-promising solutions. As Murphy (1977, p. 569) contends,

> ...this does not mean that analysts distort data to prove a point, but it does mean that their choice of conceptual lenses and their interpretations are based on more than simple facts. In short, the process of applying models has forced us to become aware that there is no such thing as a neutral unbiased observer.

Thus different evaluations following from multiple interpretations of the same reform program promise greater utility, a more sophisticated understanding of change efforts, and better social science. At the same time, they lead to greater frustration for policy makers seeking consensus on problem framing, appropriate treatment, and standards for evaluation (Cohen and Weiss, 1977). Recent attempts to view and evaluate educational change from multiple research perspectives, as I will discuss in this paper, have been valuable but less than comprehensive (Galt and Smith, 1976). With the inclusion of conflicting ideological perspectives on reform and evaluation as presented here, seminar participants will be better able to address the unavoidable question: "Which paradigm and theory should I choose to evaluate educational reform at the local level?" and to defend their choice given the entire range of options available.

Before addressing this question in detail, it may be helpful to define a few key concepts used in the discussion. I view educational reform as attempts to introduce major alterations of content, access, or structure in national educational systems. Isolated attempts to change educational practice or structure at the local level are viewed as innovations and will not be included. Thus educational reform at the local level is viewed as part of a larger attempt to implement a national reform effort. This definition

excludes the evaluation of small-scale innovation efforts, a type of educational change where narrow technical assessments of program goals/performance have predominated to the near total exclusion of evaluations that ask "who benefits and why?" (H. M. Levin, 1978)

If, in contrast--as is done here, we examine local manifestations of national reform efforts, we have both the opportunity and necessity to assess or evaluate the consequences of change efforts in light of both technical and ideological/political considerations and consequences. While the term "educational reform" has in the past had greater usage in Europe than in the United States, it is interesting to note that as patterns of U. S. educational control move--albeit incrementally--in the direction of Europe's more centralized educational systems, the term "reform" is increasingly being used to describe systematic governmental effort to alter educational systems for the better (McLaughlin, 1975; Murphy, 1971; Ornstein, 1977).

In the same vein, I view evaluation broadly as the assessment of policy change efforts and the assessment of change consequences for efficiency and equity in the educational, political, social, and economic sectors (Coleman, 1975). Clearly, the more narrowly we define an activity such as evaluation, the more easily we are able to exclude competing approaches. As my concern is to delineate the total range of perspectives and implications for practice, I am necessarily painting on a broad canvas. We will especially note the proliferation of different definitions and models of evaluation arising from demands to make evaluation findings more useful in policy making for change efforts. As will rather readily become apparent, my bias is towards conflict perspectives of educational reform and towards evaluation as social critique.

Ideology is also a key concept that merits some discussion. It should in fact be defined first as I see it existing prior to notions of reform, or paradigm, or theory, or methodology. It is a system of ideas held by individuals and groups. It is not, however, simply the aggregate of ideas

held by individuals, for the whole is more than the parts summed (Galois, 1978). Ideology is the product of human intellect. It has no independent existence but is a part of the social and policy context (Bowers, 1977). It is more than philosophy, i.e., a system of values, in that is provides a blueprint for action and behavior (Pratte, 1977: Apple, 1978 and 1979). In class-structured societies, a number of distinct ideologies will be present and the ideology of the dominant social class at any particular time will be identifiable as most influencial in providing a definition of social problems and change strategies, goals, and evaluation standards (Bourdieu, 1970 and 1973; Durkheim, 1969 and 1977). It is, perhaps, now a commonplace, that social groups sharing different ideologies compete for power. Many scientists, academics, and policy-makers nevertheless continue to resist the idea that their work cannot be "value free." In the past numerous strategies have been used to maintain an illusion of value-free scholarship and social policy. One has been, especially in the United States, to define ideology as "deviant" value systems such as fascism, communism, anarchism, and the like. From this viewpoint, liberalism, democracy, conservatism, and the like, were not ideology (Dolbeare, 1971: Paulston, 1976). David Bell, in his well-known study of 1963, The End of Ideology, went so far as to argue that with the approaching state of universal liberal consensus, we would no longer have need for such an un-American notion as ideology.

Europeans have been less naive as to the role and persistence of ideology in social life. They have, however, been perhaps even more inclined to willingly suspend disbelief and accept claims that use of the scientific method in the natural and social sciences overrides subjective influences and produces value-free knowledge. On both sides of the Atlantic, social scientists, educational planners, and evaluators have all too frequently sought to mask bias with scientific terminology and pseudo-scientific jargon. This "terminological escapism" seeks to hide values in neutral-sounding

terminology, in scientific-sounding words such as "efficiency" that often hide value judgements (Apple, 1972; Myrdal, 1969). Rather than ignore the influence of values and ideology in knowledge production and application, our task today is to map the ideological terrain and to understand better how values and ideology influence our individual and class perceptions and choices of, for example, such questions as "What are critical educational-reform needs?" "Which are the most appropriate educational-reform and evaluation strategies?" (Bourdieu, 1971).

Attempts to move in this direction have been supported by parallel developments in the philosophy of science. Thomas Kuhn (1972), for example, has provided a model of paradigm conflict that helps to illustrate how scientists sharing a world view create a research community largely agreeing upon the choice of research problems, inquiry strategies, and knowledge utilization. While recognizing the telling criticism of Kuhn's theory of scientific revolution by advocates of evolutionary theory, I find Kuhn's studies insightful, interesting, and provocative (Lakatos, 1970). Of his many definitions, I prefer the revised view of a paradigm as a "disciplinary matrix" where research exemplars and models are far more effective determinants of community substructure than are symbolic generalizations (Kuhn, 1970 and 1977; Masterman, 1970).

In this paper I define theory not in the scientific sense as a set of laws (there are no laws in social science) but as an explanatory model. In the following section, I discuss and categorize theories or explanations of educational evaluation under two broad methodological headings, the objectivist and subjectivist epistemological orientations.

2. Problems in the Utilization of Evaluation in Reform Efforts

During the past several decades, numerous national educational-reform efforts have been planned and implemented around the world (Merritt and Coombs, 1977; Paulston, 1978; Simmons, 1979). While there is widespread

lipservice to the idea that evaluation research should make an important contribution to the reform process at national and local levels, this has only rarely been the case (Patton, 1975 and 1978; Stufflebeam, 1971). In this section, I will examine the argument that the utilization problem is primarily methodological, i.e., that we need to supplement the traditional quantitative, experimental approach with a qualitative/subjective approach. Advocates of multiple methods suggest that a combination of both research paradigms offer increased prospects to make evaluation more relevant to the needs of reform planners and managers, and ergo to greatly increase the utilization of evaluation findings (Parlett and Hamilton, 1977; Scriven, 1976; Sechrest, 1979).

In this section, I will also examine attempts to develop evaluation strategies and models within both research paradigms. This attempt at meta-evaluation, or the evaluation of evaluation, seeks to assess something of the potential of each research paradigm by contrasting the relevance claims and accomplishments of evaluators working in each paradigm (Gowin and Millman, 1978). We will then move on to an examination of the need to recognize multiple ideological orientations to evaluation as well as multiple research paradigms. This is imperative if we are to more adequately explain the relation of theory choice and evaluation potential to inform better theory and practice.

The advantages and disadvantages of three earlier narrow definitions of evaluation as seen by Stufflebeam (1971) are presented in Figure 1. In the first definition of evaluation, i.e., as measurement, the symbol $\equiv$ should be read as "is identical to." This is the traditional orientation of psychology where an attempt is made to assess change using scientific method. Reliability of findings are a primary concern and in the German Wissenschaft, or "hard science" tradition, objectication and measurement are claimed to provide a value-free method of generating facts, evaluations, and, ultimately, laws (Campbell, 1979, 1973, and 1975; Freeman, 1976; Karier, 1973).

FIGURE 1

ADVANTAGES AND DISADVANTAGES OF DIFFERENT DEFINITIONS OF EVALUATION

	Advantages	Disadvantages
(1) E ≡ M MEASUREMENT	Builds directly on scientific measurement movement Objective Reliable Data are mathematically manipulatable Norms and standards emerge	Narrow instrumental focus Inflexibility because of time and cost to produce new instruments Judgments and the criteria for making them are obscured. Variables currently considered as not measurable are eliminated, or labeled unimportant
(2) E ≡ (P ≅ O) CONGRUENCE	High degree of integration with the instructional process Data available on both student and curriculum Possibility of feedback Objective referent and built-in criteria Possibility of process as well as product data	Places evaluator in technical role Focuses narrowly on objectives Elevates behavior as the ultimate criterion of <u>every</u> educational action Focuses on evaluation as a terminal process
(3) E ≡ PJ JUDGMENT	Easy to implement Brings all variables into consideration Takes experience and expertise into account No time lag while waiting for data analysis	Dictated mainly because of ignorance or lack of sophistication Questionable reliability Questionable objectivity Not susceptible to ordinary scientific prudential measures Both data and criteria are ambiguous Generalization very difficult

Source: Stufflebeam, 1971, p. 15.

The congruence definition, where, as in geometry, the symbol ≅ should be read as "congruent with, "emerged after World War II with the need to subordinate measurement to management in social-reform activities. This has become the most common definition as widespread acceptance of systems-analysis approaches have come to view measurement and evaluation as an important aspect of the scientific management of change (Apple, 1972; House, 1978b; Dalin, 1978).

Difficulties in securing a more productive combination of these two definitions and approaches to evaluation in U. S. educational reforms have become apparent (Ornstein, 1976). Attempts to develop an experimental approach to War on Poverty programs may have produced rigorous measurement, but they did little to help improve the education of poor children. In April 1973 the Brookings Institution convened a conference of evaluators and managers of reforms to ascertain why experimental attempts at compensatory educational reform had been less than successful. Kermit Gordon, President of Brookings, framed the problem to open the conference as follows:

> Although all the results are not yet in, it is already clear that much less was learned from planned variation than had been hoped. No one variation emerged as significantly superior to the others and no firm conclusions could be drawn about the relative effectiveness of methods of improving the education of poor children. What went wrong? Were the planned variations poorly designed, poorly executed, or poorly evaluated? Or was the whole idea of planned variation naive in the first place? (Rivlin and Timpane, p. vii)

The experts, whose careers and income in many cases followed from their professional involvement in the educational reform evaluation and management sector of the Poverty Industry offered two responses to the indictment. One represented a strong concensus. As exhorted by Rivlin (1975, p. 18), it called for:

> . . . clearer objectives, more time, and cleaner statistical design. . . . The experiment would begin as a highly controlled experiment at a single site involving random assignment to

> control and treatment groups and careful observation of inputs and outcomes. The whole cycle from initial experimentation to dissemination of the field test would take ten to 12 years.

Rivlin concluded that:

> . . . most of the participants looked forward to a day when more sensitive measuring instruments, more fully developed models, and more carefully designed field studies would make a major contribution to improving the effectiveness of education. (p. 21)

David K. Cohen, in contrast, pointed out that experimental approaches to change and evaluation of change effects, while appealing in principle, have limited policy relevance. Social concerns and priorities for change are not stable over time. Experimental issues undergo rapid change during the endeavor. Reform cycles are generally short and unpredictable, and knowledge from experiments tends to increase complexity rather than clarify the reform effects and action alternatives. James Coleman, also in the minority, argued that the experimental paradigm for educational reform adopted at the federal level was wrong, or at least incomplete, as it assumed:

> . . . the existence of a single decision-maker requiring information feedback, and ignored the role of teachers, administrators, parents, children, and other participants in any change effort.

Stufflebeam's third definition of evaluation (1971) as subjective judgment has gained adherents and increased legitimacy with the decline of positivism and the increased recognition of political variables in evaluation during the 1970's (Eisner, 1972; House, 1978; Roos, 1979). In Figure 2, House includes a number of evaluation models grounded in this orientation, i. e., art criticism, accreditation, adversary and transaction. Rivlin (1973) as well has advocated a forensic or legal disputation model for the assessment of reform effects.

FIGURE 2

A TAXONOMY OF MAJOR EVALUATION MODELS

Model	Proponents	Major Audiences	Assumes Consensus on	Methodology	Outcome	Typical Questions
Systems Analysis	Rivlin	Economists, managers	Goals; known cause & effect; quantified variables.	PPBS; linear programming; planned variation; cost benefit analysis.	Efficiency	Are the expected effects achieved? Can the effects be achieved more economically? What are the most efficient programs?
Behavioral Objectives	Tyler, Popham	Managers, psychologists	Prespecified objectives; quantified outcome variables	Behavioral Objectives; achievement tests	Productivity; accountability	Are the students achieving the objectives? Is the teacher producing?
Decision Making	Stufflebeam, Alkin	Decision-makers, esp. administrators	General goals; criteria	Surveys, questionnaires, interviews; natural variation	Effectiveness; quality control.	Is the program effective? What parts are effective?
Goal Free	Scriven	Consumers	Consequences; criteria	Bias control; logical analysis; modus operandi	Consumer choice; social utility.	What are all the effects?
Art Criticism	Eisner, Kelly	Connoisseurs, Consumers	Critics, standards,	Critical review	Improved Standards	Would a critic approve this program?
Accreditation	North Central Association	Teachers, public	Criteria, panel, procedures	Review by panel; self study	Professional acceptance	How would professionals rate this program?
Adversary	Owens, Levine, Wolf	Jury	Procedures and judges	Quasi-legal procedures	Resolution	What are the arguments for and against the program?
Transaction	Stake, Smith, MacDonald, Parlett-Hamilton	Client, Practitioners	Negotiations; activities	Case studies, interviews, observations	Understanding; diversity	What does the program look like to different people?

Source: House, 1978, p. 12.

3. Subjective and Naturalistic Approaches

Variations on subjective approaches have burgeoned in recent years under the rubric of naturalistic, or non-experimental, evaluation. Here largely case-study evaluations using illustration, analogy, and metaphor seek to establish a structure of reality as perceived by participants in change efforts (Stake, 1978). Denzin (1971) argues that these symbolic interactionist approaches promise more accurate assessments of how individuals view and experience reform attempts. The validity of empirical data from multiple perspectives is tested by triangulation and cross-checking different data sources and by comparing perceptions of participants--i.e., by confirming one kind of data with another kind, by confirming observations through replication (Scriven, 1973).

Naturalistic evaluation seeks to explain change outcomes in terms of those who are involved and multiple perspectives are accordingly necessary to illuminate the whole process. Events or interactions are typically viewed empirically over time. The focus is on complex issues and relationships and the evaluator is seen as an integral part of the research act. His task is to present explanations derived from individual's accounts of their own and collective behavior (Hein, 1976) House, 1977). The participants' world of action and meaning supply the research problems, key concepts, and indicators: "In constructing explanations the naturalist looks for convergence of his data sources and develops sequential, phase-like explanations that assume no event has single causes. Working backwards from an important event is a common procedure. Introspection is a common source of data" (House, 1977, p. 37).

While the evaluator is charged with the task of securing and reporting "true" facts and statements, the interpretation of what case studies mean for policy and reform is individually interpreted. Thus, the audiences for naturalistic evaluation must assume considerable responsibility for the validity of their own interpretations (Chelimsky, 1978).

This approach seeks to escape the problem of highly reliable instruments that have questionable validity. Polanyi (1958) has called this traditional orientation in science "objectivism," i.e., the belief that observations are "scientific" when subject to independent verification without reference to the person who produced the observations. Naturalist evaluation rejects "objectivism" and views the evaluator, along with the policy-maker and educational planner, et al, as involved actors or stakeholders. Their impartiality does not derive from being "value free" but rather, from a recognition of and attempt to balance contending ideologies and forces in reform efforts. Clearly the evaluator must not be viewed as having previously sided with one position or another. He will have to resolve issues by resorting to objective criteria; but as House points out:

> ...when his own impartiality is at stake, it is not enough that he give evidence of objectivity. He must give evidence of his impartiality by showing how he has acted contrary to his own interests in the past....One must take seriously the opinions of other people and engage them in serious discourse. This is the realm of argumentation and the proper sphere of evaluation. (1977, p. 4)

While the logic of naturalistic evaluation stresses meaning in context assumptions, Denzin (1977) argues that this research style is not necessarily incompatible with empirical social science committee to "sophisticated rigor." It rejects the measurement approaches termed "naive positivism" and abstracted empiricism where "scientific protocol" stands in the way of careful, close-up case studies of social process and social change. Rather, at best, naturalistic evaluation works back and forth between quantitative and qualitative data, uses multiple methods, seeks out diverse data sources and attempts to provide behaviorally grounded explanations, or theories of behavior. Methods or perspectives are not viewed as inherently more or less useful. Rather, usefulness is determined by problem context and the rigor under which the approach is employed. Thus the quantitatively oriented evaluator could, conceivably, also use the naturalistic perspective.

The key concept in subjectivist epistemology is Verstehen, i.e., intuition or experience. Where precise measurement of events and objects is possible, scientific verification by empirical replication has produced powerful theories about how things work, especially in the study of physical and biological phenomena.

> Antipositivists argue that methods of the hard sciences are inappropriate for the social sciences where research phenomena are rarely physical objects that can be measured. Man, moreover, is a choice-making creature not subject to behavioral regularities, [pace Skinner], which are in any way comparable to the natural "laws" scientists seek to generate. (Gait and Smith, 1976)

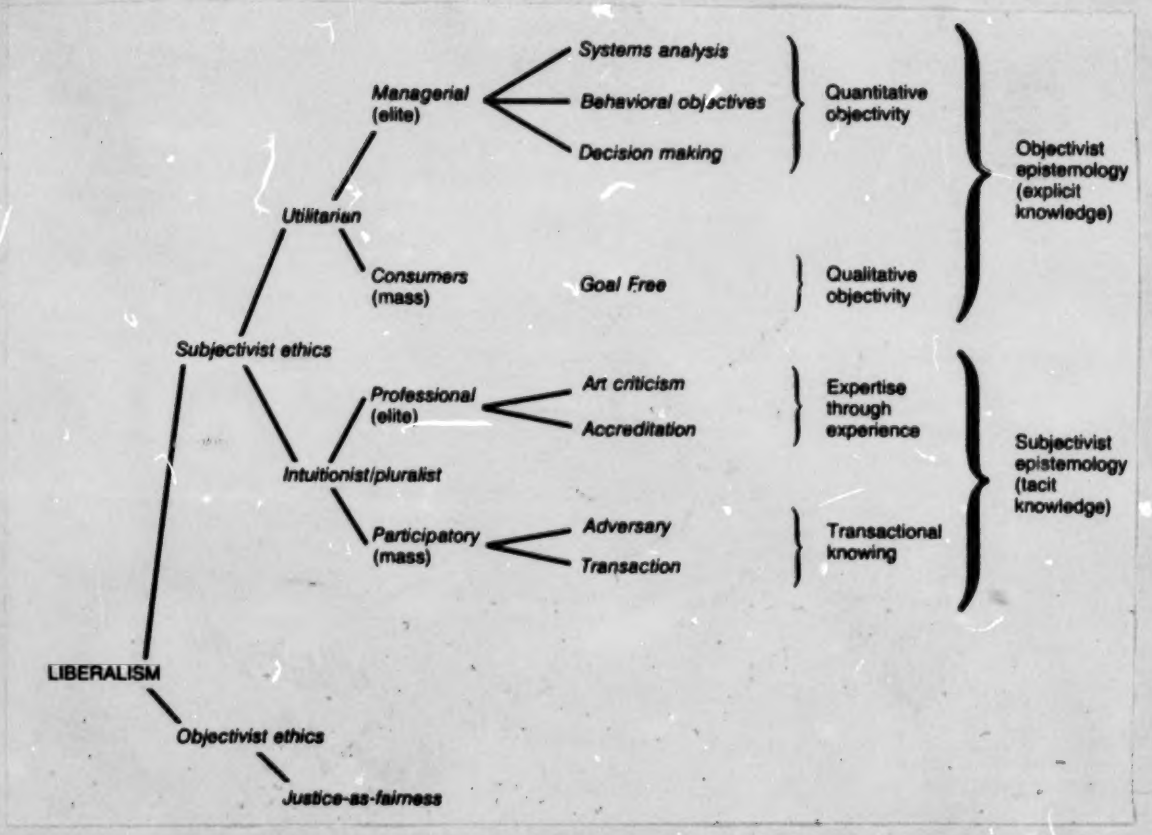
Here the phenomenologists would argue that verstehen offers the only way to study social phenomena, i.e., from the generalization of individual experience to group and human experience in general. As may be seen in Figure 3, this orientation is present to some extent in the qualitative, expertise, and transactional knowing models.

Other social scientists as well argue that the methods of science can, with qualifications, be used to study social phenomena, and that the verstehen approach as educational guesses along with theoretical knowledge can indeed feed into the positivistic process of hypothesis formation, operationalization, and testing (Cohen, 1970). From this perspective, the objectivist and subjectivist epistemological orientations to evaluation research would be viewed as different sides of the same coin and not a quantitative/qualitative polarity. In his excellent study, The Art of Scientific Inquiry (1958), Beveridge examines the role of subjective knowledge, of intuition, and insight in the resolution of famous scientific problems.

Guttentag (1973) describes an evaluation model that seeks to combine a verstehen approach with measurement to produce useful information for the planning and evaluation of reforms. The model can be used to quantify values of decision-makers and others involved in reform efforts. It is based on decision theory and on the assumption that the inherent subjectivity of

FIGURE 3

EVALUATION PERSPECTIVES WITHIN THE LIBERAL PARADIGM



Source: Adapted from House, 1977.

decision-making makes classical experimental designs "not very useful." (See also Cohen and Weiss, 1977; Sharpe, 1977; Simon, 1965). As in all decision-theoretic approaches, value judgments, and preferences of decision-makers are intrinsically tied to the data-gathering process (Wagle 1970; Williams, 1975). As data comes in, programs can be adjusted in response to results of this formative evaluation. Decision-makers are seen to need answers to two types of questions: i.e., What's at stake and what are the odds? Bayesian statistics provides an optimal mathematical model to compare the subjective hypotheses of decision-makers with each other, rather than with null hypotheses. The decision-maker's prior and posterior subjective probabilities are used for probability distributions. (Fennessey, 1976) The answer to what's at stake, Guttentag suggests, requires the measurement of values or "utilities." These are defined as "the negative as well as positive properties assessed by someone (according to his definitional framework) as being the result of one course of action." Each course of action in educational reform could thus be viewed as having its own utilities. One could seek to ascertain maximum overall utilities for one course of action, or across several possible concurrent actions.

In this section, I have noted that evaluation cast in an objectivist mode has promised much but contributed little to either the practice or theory of educational reform. Attempts to provide subjective methodological alternatives have, accordingly, largely sought to avoid the imposition of a priori constraints or controls on antecedent conditions (i.e., independent variables) or the imposition of constraints on the outputs (i.e., dependent variables) of evaluation. As we have seen, this fundamental difference in methodology follows from the two major theoretical perspectives that have dominated social science for nearly a century. Positivist evaluators seek to draw upon the wissenschaft tradition advanced by Comte and Durkheim and others. While they rarely seek laws, they do consider such social phenomena as educational reform to be observable and measurable "things" that exercise an external and coercive force on human behavior (Strauch, 1976). In contrast,

phenomenological evaluators draw upon Weber, and others, seek understanding, and are prone to accept the natural range of variables instead of arbitrarily shaping conditions to represent a hypothesis (Filstead, 1970). These two groups clearly approach evaluation from vastly different methodological orientations and can, perhaps, be viewed using Kuhn's notion of disciplinary matrix as representatives of competitive research paradigms. We should note, however, that this distinction does not mean that the two paradigms are at all points mutually exclusive. They can indeed be polarized along a number of important dimensions, i.e., philosophical base (logical positivism vs. phenomenology); inquiry paradigm (experimental physics vs. ethnography); purpose (verification vs. discovery); stance (reductionist vs. emergent);style (intervention vs. selection); value structure (singular vs. pluralistic); setting (laboratory vs. nature); context (unrelated vs. relevant); conditions (controlled vs. invited inference); scope (molecular vs. molar); methods (objective-intersubjective agreement vs. objective-factual confirmable); and so forth as Guba (1978) has done. But they can also be seen as potentially complementary empirical approaches that offer evaluators two methodological orientations to assess educational-reform outcomes where until recently we had only one (Karabel and Halsey, 1977).

4. Ideological Perspectives on Educational Reform and Its Evaluation

I would now like to take note of a largely ignored distinction in meta-evaluation; i.e., the presence of conflicting theories of social change that as ideology influence the definition of the reform problem and the choice of evaluation strategies, standards, and relevant data. Recent controversy in educational evaluation has focused almost exclusively on how different values and world views lead evaluators to choose different research paradigms and methodologies (House, 1978 and 1979; Rossi and Wright, 1977; Stern, 1979). Where convergence is most valued, the choice will most often be experimental design. Where divergence is most valued, the choice usually is ethnographic

design. Here individuals make choices that follow from individual values and group norms. In Figure 3, for example, House has indicated how present evaluation perspectives and models are grounded in the liberal world view, or ideological paradigm. This work represents something of a breakthrough in the U. S. literature in that it recognizes the link between ideology and evaluation research decisions. A number of European writers have presented detailed examinations of this same relationship over the past decade (Bourdieu, 1971; Habermas, 1968; MacDonald, 1974). House ignores, however, comparable relations between ideology and evaluation in the other major social-change orientation found in the critical/conflict paradigm. Only recently have American researchers begun to recognize and investigate how a conflict perspective on social change, or reform, tends to facilitate what might be termed "critical evaluation."

As a step in this direction, I have summarized in Figure 4 how theories or causal modes of social change can be grouped with each paradigm, and what I view as the core assumptions of each theory (Paulston 1976). Readers interested in how these categories are defined and how they can be used to identify and classify educational-reform evaluation efforts are referred to Paulston (1977 and 1978). Here we will build upon the framework presented in Figure 4: (1) to delineate a conflict paradigm or critical approach to educational evaluation; (2) to illustrate something of the range of theories available within the critical approach; and (3) to indicate how theory choice influences subsequent choices for evaluation rationales, designs, and outcomes.

The conflict perspective on educational reform and evaluation is in many ways the opposite of the equilibrium or liberal world view. Where liberals stress consensus, individualism and utilitarian values and see reform as incremental steps toward greater efficiency in existing systems, those using a conflict framework see liberal reform as attempts to perpetuate class and group advantage (Karabel and Halsey, 1977; H. M. Levin, 1974 and 1975; Paulston, 1979; Paulston and Simmons, 1978). For liberals, evaluation of

FIGURE 4

RELATIONS BETWEEN THEORIES OF SOCIAL AND EDUCATIONAL CHANGE/"REFORM"

Social Change		*Illustrative Linked Assumptions Concerning Educational-Change Potentials and Processes*			
Paradigms	*"Theories"*	*Re Preconditions for Educational Change*	*Re Rationales for Educational Change*	*Re Scope and Process of Educational Change*	*Re Major Outcomes Sought*
Equilibrium/ Liberal	Evolutionary	State of evolutionary readiness	Pressure to move to a higher evolutionary stage	Incremental and adaptive; "natural history" approach	New stage of institutional evolutional adaptation
	Neo-Evolutionary	Satisfactory completion of earlier stages	Required to support "national modernization" efforts	"Institution building" using Western models and technical assistance	New "higher" state of education and social differentiation/ specialization
	Structural-Functionists	Altered functional and structural requisites	Social system need provoking an educational response; exogenous threats	Incremental adjustment of existing institutions, occasionally major	Continued "homeostasis" or "moving" equilibrium; "human capital" and national "development"
	Systems	Technical expertise in "systems management," "Rational decision making" and "needs assessment"	Need for greater efficiency in system's operation and goal achievement; i.e., response to a system "malfunction"	Innovative "problem solving" in existing systems: i.e., "Research and Development approach"	Improved "efficiency" re costs/benefits; adoption of innovations
Critical/ Conflict	Marxian	Elite's awareness of need for change; or shift of power to socialist rulers and educational reformers	To adjust correspondence between social relations of production and social relations of schooling	Adjustive incremental following social mutations or radical restructuring with Marxist predominance	Formation of integrated workers, i.e., the new "Socialist Man"
	Neo-Marxian	Increased political power and political awareness of oppressed groups	Demands for social justice and social equality	Large-scale national reforms through "democratic" institutions and processes	Eliminate "educational privilege" and "elitism"; create a more equalitarian society
	Cultural Revitalization	Rise of a collective effort to revive or create "a new culture." Social tolerance for "deviant" normative movements and their educational programs	Rejection of conventional schooling as forced acculturation. Education needed to support advance toward movement goals	Creation of alternative schools or educational settings. If movement captures polity, radical change in national educational ideology and structure	Inculcate new normative system. Meet movement's recruitment, training, and solidarity needs
	Anarchistic / Libertarian	Creation of supportive settings; growth of critical consciousness; social pluralism	Free man from institutional and social constraints. Enhance creativity need for "life-long learning"	Isolated "freeing up" of existing programs and institutions, or create new learning modes and settings, i.e., a "learning society"	Self-renewal and participation. Local control of resources and community; elimination of exploitation and alienation

Source: Paulston, 1976 and 1977.

change efforts seeks to provide information for more efficient change. In contrast, evaluation from a conflict perspective seeks to provide social critique that illuminates how social and economic inequalities are produced, maintained, and legitimized (Ratcliffe, 1978). These rather fundamental differences between liberal and conflict views of evaluation purposes, designs, and outcomes become apparent when Figures 3 and 5 are contrasted. We might also note the different levels of analysis and explanation favored in these two major approaches. Evaluation from a liberal/equilibrium perspective, for example, views man as a rational economic actor responsible to the group and value consensus for his actions (House, 1978). Liberal evaluation uses technological rationality to assess human behavior in project-level settings. Evaluation in a critical/conflict mode assumes dis-census, group or class struggle for power and advantage, and the need to explain the outcomes and impact of reform efforts as the consequence of ideological and group/class conflict in unequal societies. The ultimate standard for evaluation from equilibrium perspectives is social efficiency (Jensen, 1969; Kandell, 1979); from conflict perspectives the utlimate evaluation standard is social equity and social justice (Coleman, 1973). Where liberal evaluation seeks to foster efficient change using technological rationality and such measures as cost-benefit or cost-effectiveness analysis, conflict evaluators espouse what might be viewed as power-benefit analysis. They seek to evaluate, or explain, reform outcomes as a consequence of the relative power of stakeholders, or groups involved, to secure the policies and reforms most advantageous to their interests (Bourdieu, 1970; Carnoy and Levin, 1976).

Given the potentially subversive nature of critical evaluation approaches to established privileged groups, it is, perhaps, not difficult to explain why this type of evaluation has been so long ignored and/or suppressed. By restricting educational evaluation to such low-level technical tasks as defined in Figure 1, the more holistic critical evaluations of who gets what and why from national educational-reform efforts at the local level could be dismissed

FIGURE 5

APPROACHES TO EDUCATIONAL REFORM-AND EVALUATION FROM THE CRITICAL/CONFLICT PARADIGM

Theory	Proponents	Major Audiences	Research Orientations	Evaluation Outcomes	Typical Evaluation Questions
Marxist →	Althusser Bowels/Gintis Carnoy Levin	Social Critics Socialist Planners & Reformers Radical economists Revolutionaries	Historical-class struggle Economic	Social critique and Revolutionary diagnosis	How do contradictions in the social relations of production and education influence educational reform?
Neo-Marxist and "Critical Theory" →	Apple Collins Habermas Bourdieu	Social Critics Social Scientists Social Democratic Planners & Reformers	Status group competition-Sociology of knowledge	Social critique Social science knowledge	How do power elites use educational refrom to maintain privilege?
Anarchism →	Feyerabend Illich Kohr	Libertarians Populist planners and social reformers	Anti-method Anti-structure Anti-bigness	Philosophical and Social Critique; Exhortation; Alternative Life Style Models	Do reforms serve to liberate or dominate the human spirit and potential?

as, at best, sociology or politics of education or comparative education. At worst they have been viewed as partisan "ideology" or "politics," but rarely if ever as evaluation. When, however, we define educational evaluation as attempts to explain what happens to the life chances of youth from different social groups as a consequence of chance efforts, there is a considerable corpus of work available to illustrate the usefulness of conflict approaches to evaluation for both the theory and practice of educational change (see Paulston, 1977).

Within each paradigm, there are a number of overlapping and competing theories or causal models seeking to present systematic explanations of reform phenomena. In Figure 5, I have selected three different conflict theories, i.e., the Marxist with its bias towards economic determinism; the Neo-Marxist and critical theory which advocates power-determinism; and the Anarchist theory with its libertarian, anti-structure bias and concern for individual liberation and autonomy. These three theories while more or less sharing the core assumptions of the conflict paradigm, offer quite different lenses for viewing and evaluating educational-reform phenomena. Other choices are, of course, certainly possible: mine are only meant to be illustrative, not definitive (Binns, 1977; Karabel and Halsey, 1977). The interested reader is directed to Paulston (1978) where over 200 evaluation studies of national educational reform from critical/conflict perspectives are grouped, abstracted, and contrasted with some 400 reform evaluation studies using various equilibrium models.

The relationship between a choice of theoretical framework and choice of appropriate methodology is all too little studied (Stichcomb, 1978). Clearly, as House has demonstrated, evaluators of the liberal persuasion tend to prefer positivist methods and the trappings of science (Keat and Urry, 1975; Campbell, 1976). Conflict-oriented evaluators tend to view evaluation research not as measurement and verification, but as "thick explanation" (Eickelman,) 1979). They favor historical method and macro political economy approaches in assessing consequences of reform and change (Bourdieu, 1972; Bazin, 1973;

Binns, 1977). This said, we must also acknowledge that one's ideological orientation to change and the evaluation of change does not necessarily prescribe a particular method. Critical evaluation can meet the canons of positivism and wissenschaft and evaluation as measurement. (Carnoy, 1975; Guttentag, 1973; MacDonald and Walker, 1974; M. Levin, 1974) It is more comfortable, however, with a less positivistic and more pluralistic approach to method including macro historical analysis, and most recently, with radical phenomenological approaches (Aronowitz, 1978; Bernstein, 1976; Livingstone, 1978; Smart, 1976; Touraine, 1977; Turner, 1979; Zuñiga, 1975).

5. On the Use of Multiple Approaches to Educational Evaluation

Given the current state of the art in educational evaluation, the evaluator can no longer pose as an impersonal, dispassionate researcher free of contaminative values and class ideology who stands apart from reform efforts so as to more objectively pass judgment on process and outcomes. Rather, we have come to acknowledge, albeit some less willingly than others, that educational policy-making and reform, as a redistribution process, are highly political activities and evaluation is usually at the storm center of induced change efforts (Katz, 1979; Scribner, 1970; Sroufe, 1977; Tapper, 1978; Williams and Evans, 1979; House, 1974; Kogan, 1975; Meld, 1974).

With the possibility of multiple ideological and methodological approaches, it is now required of the evaluator to make at least three basic choices: i.e., (1) between the equilibrium and conflict social-change paradigms, (2) between theoretical frameworks within each of the social-reform paradigms, and (3) between the positivist and phenomonological research paradigms. Clearly, no one paradigm or theory should be seen to have a monopoly on explanation or "truth." All provide only a limited, partial perspective. Under certain conditions, one rather than the other theory or theories might offer more useful and compelling data and explanations, and thus present a more rational choice (Sharp, 1977). In any case, choices must be made and defended explicitly (Lundgren, 1973; Williams and Elmore, 1976).

As to the relative absolute value of competing paradigms and the meta-evaluation of multiple approaches to evaluation, issues of this nature will never be resolved to the satisfaction of all (Kuhn, 1970). The evaluator does, however, have a number of possible tests and standards available to direct and defend theory choice. The philosophers of science, for example, offer the falsification test, paradigm allegiance, and formal logic. (Lakatos, 1970; Kuhn,1977; Feyerabend, 1970; Habermas, 1978; Grünbaum, 1976 a and b) The managers and technicians are more concerned with "what works," utility and efficiency, and "sub-optimization." (Simon, 1965; Williams, 1975; Campbell, 1973; Hultin, 1976; Lindbloom, 1959; Useem, 1976 a and b; Weiner, 1979). The political idealogs tend to choose theories that follow from and support closed-idea systems (Feyerabend, 1975; Vernon, 1970; Lucas, 1978; Karier, 1973 and 1974). While the more market- and career-oriented evaluators look to the professional and intellectual market place to see what ideas, concepts, slogans, and the like, are in vogue and à la mode (Glueck and Lawrence, 1975; Zuckerman, 1978). More helpful, perhaps, would be tests of theories via parallel equilibrium and critical evaluations of the same reform effort through formative and summative evaluation stages. Here, as proposed in Figure 6, evaluations from both liberal/equilibrium and critical/conflict could bring their evaluation research questions and standards to bear on any stage or level of a national educational reform. Such multiple evaluation approaches drawing upon positivist and phenomenological, as well as equilibrium and conflict approaches would let all theories contend and compete to produce, hopefully, a more varied, insightful, and ultimately useful evaluation product (DiCostanzo, 1979).

Such an approach would offer policy-makers and planners a wider range of relevant data and a more sophisticated assessment of reform processes and outcomes. There is also evidence that when different theories actively compete to explain the same reform phenomena--as in the nature versus nurture controversy--the interaction leads exponents of each orientation to sharpen and refine their theoretical framework and evaluation research design (Rist,

FIGURE 6

A DIALECTICAL MODEL OF EQUILIBRIUM/LIBERAL AND CRITICAL/CONFLICT APPROACHES TO THE EVALUATION OF EDUCATIONAL REFORM

Illustrative Critical/Conflict Educational Approaches and Standards →	How do reform goals reflect interests and power of dominant social groups? (Conflict assumed) (House, 1978b)	Do the reform activities change or maintain life chances for children of different groups or classes? (Inequity assumed) (Apple, 1979)	Did the reforms alter or maintain power relations between dominant and subordinant social groups or classes? (Cui bono?) (H. M. Levin, 1974)
The Reform Policy, Planning Process at the National and Local Levels →	Formulation of goals, ends, and means →	Implementation of changes in educational content, structures, etc. →	Assessment of reform outcomes and consequences
Illustrative Equilibrium/Liberal Evaluation Approaches and Standards →	How will the reform goals help to increase efficiency of the educational sector and its contributions to the social, political, and economic sectors? (Consensus assumed) (Rivlin, 1975)	Are changes efficiently managed and related to assessed social needs? (Dalin, 1978)	Did the reform achieve its objectives? (Jensen, 1969)

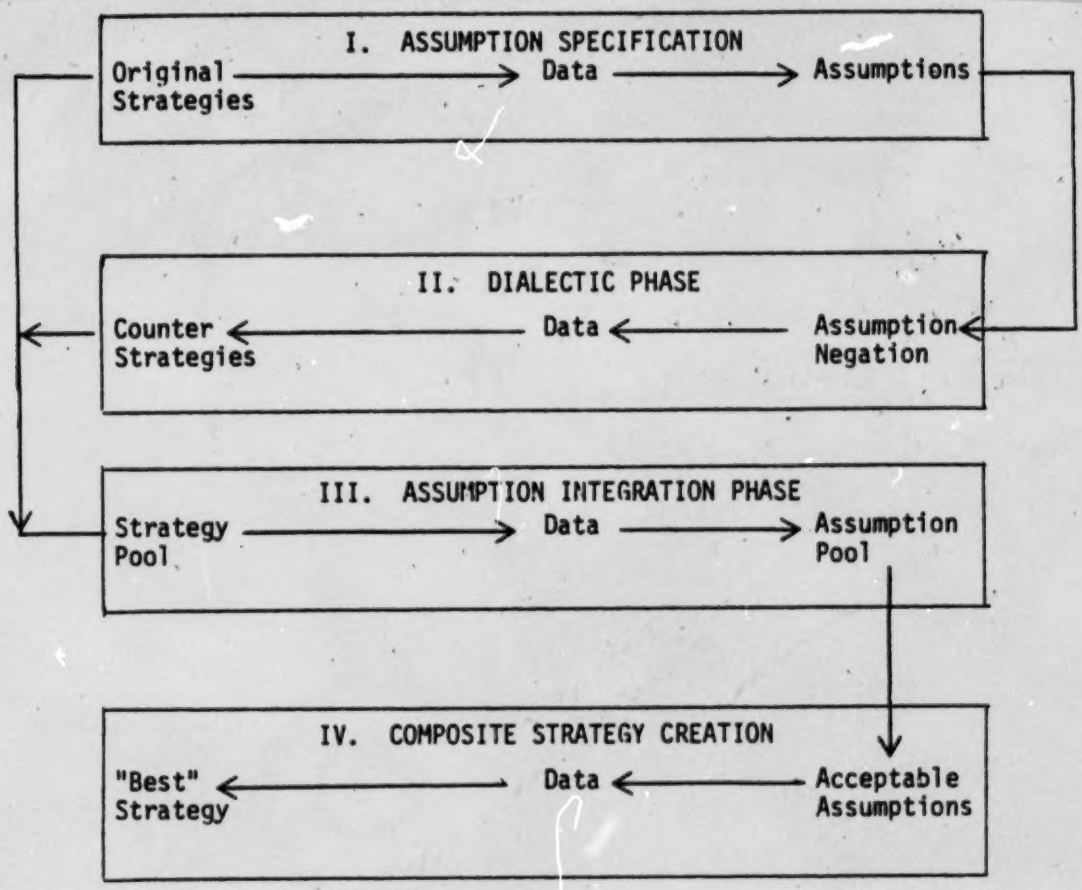
1977; Trend, 1978). If we are to acknowledge multiple paradigms and allow them to compete in the evaluation of change efforts, we will be required to pay closer attention to two rather neglected questions: i.e., How are we to dialectically encompass multiple evaluation strategies in decision-making, and How are we to identify and explicate the values that support our paradigmatic and theoretical choices? I will conclude by briefly noting some important new work that addresses these questions.

6. Some Implications of Multiple Evaluation Strategies for Reform Practitioners

While comparative evaluation of educational reform would be desirable, it would also be expensive and would, of course, require the commitment and support of responsible national and local agencies directing reform. Individual evaluators may, accordingly, want to become better informed of opportunities for less complex, low-level dialectical approaches. A promising, new evaluation model based on strategic assumption specification may serve as an illustration. Mitroff and Emshoff (1979) have produced a dialectical method to resolve the problem of evaluation strategy choice where various possible approaches to reform assessment rest on assumptions that are in sharp conflict with one another. They suggest that with this kind of situation, the primary purposes of assumption specification are: (1) to help surface for explicit examination, the underlying assumptions that stakeholders and evaluators often unconsciously bring with them to an evaluation design effort; (2) to compare and to assess systematically the assumptions of different evaluators; (3) to examine the relationship between underlying assumptions and the resultant strategies which are derived and dependent on them; and (4) to attempt to formulate new, novel, and originally unforeseen policies based on previously unexamined and unforeseen assumptions. Figure 7 presents the four basic steps in this process. Related attempts to develop dialectical approaches to educational planning, reform, and evaluation have also rejected rigid Marxist views of dialectics as a science. Instead, dialectics is viewed as a promising method to identify, encompass and reconcile opposites (Mason, 1969; Sherman, 1976; Gouldner, 1976; Mitroff and Kilmann, 1978).

FIGURE 7

A DIALECTICAL MODEL FOR POLICY EVALUATION AND ANALYSIS



Source: Mitroff and Emshoff (1979), p. 23.

Given the persuasive influence of social and personal values on the evaluation of educational reform at the local level and the recent widespread recognition of this influence, the need for values-clarification approaches has become increasingly evident (House, 1977; Reagan, 1976; Stone, 1978). I view values, along with Goulet (1971), in a general way as conceptions of the desirable, as attitudes, preferences, life-styles, normative frameworks, symbolic universes, belief systems, and networks of meaning men give to life. In evaluation, value positions dictate which goals, strategies, and methods are to be considered the most desirable in any given evaluation (Myrdal, 1978 and 1972; Neave, 1977; Scriven, 1972 and 1976).

In this regard, Smith (1978) has provided a useful examination that delineates four primary sources of values within an evaluation context, i.e., the political aspects of evaluation work, the influence of social movements, organizational influences, and the evaluator as a source of values. He argues that, while values are inescapable, they are also beneficial:

> Value positions help to define and delineate an evaluation problem and determine its practical significance for particular audiences. Furthermore, although evaluation terminology and models are value laden, they are essential tools. Difficulties arise, however, in evaluation studies where the values influencing the results are not clear and explicit and the evaluation research is therefore portrayed or viewed as something other than it actually is. In many studies, pluralistic values and the resultant countervailing forces complicate the evaluation work. Various audience groups advocate different objectives as the "true" purpose of the evaluation study and pressure evaluators into "hatchetman" or "whitewash roles." Other individuals attempt to shift the initial focus from, for example, student outcomes to personnel adequacy. Under such circumstances, evaluators are often hard pressed to identify the various interest groups and values being promoted, and to understand how these values may be affecting the direction of the evaluation work. They need a means of dealing with such influential values. (pp. 24-25)

Practitioners at this seminar are no doubt familiar with this dilemma. It is not so much the value positions themselves that are the problem, but that values are hidden and not easily accessible. I have argued the possibility and desirability of using alternative paradigmatic sets of values to judge reform programs (Figure 6), but this would require extra resources. Evaluators will most often choose a particular set or mix of evaluations (Figure 7) within a given paradigm and utilize resources using that perspective. If we go to the evaluation literature, at least four approaches to dealing with values can be identified and offered as a first step in helping reform practitioners cope with competing value systems (Smith, 1978).

The first would be to follow Myrdal's (1969) advice to make values explicit, to openly state value positions. This, he contends, helps to demonstrate the evaluator's awareness of values, forces him to account for them, and exposes values for what they are. "Ideally, one would use alternative sets of values to judge a [reform] paradigm." (p. 131)

Berlak (1970) suggests a second approach where the evaluator may choose from three different possible positions in making value judgements about the worth of a reform program being judged: i.e., he may only: (1) describe the project, (2) suggest judgement criteria, or (3) make an actual judgement of worth. Here the evaluator decides on the extent to which his or her values will shape the evaluation design and influence the valuing.

Scriven (1976) suggests comparative evaluations of the same reform project. Here, approaches to evaluation incorporating conflicting values, much as economic cost-benefit analysis would compete with, for example, political-benefit analysis to help resolve questions about who benefits from reform activities and who benefits most from the choice and use of equilibrium or conflict approaches to evaluation of reform. While Scriven writes from what might be viewed as an "enlightened" liberal perspective, i.e., he recognizes that those concerned with greater social efficiency must address problems of inequality and interest-group conflict, his call for comparative evaluation presents a most useful rationale for the acknowledgement and utilization of critical evaluation perspectives as well.

Where Scriven's comparative approach emphasizes procedures seeking to test the dominance of one value position over another, a fourth approach emphasizes the use of multiple value perspectives in order to achieve a fuller understanding of a reform program in context. Here, all groups participating in the reform are given the opportunity to specify their value positions so that the full range of--albeit possibly conflicting--value positions can be charted. Thus values regulation is facilitated and the evaluator's role changes from that of judge and possibly executioner to one of arbitrator (Brickell, 1976; Bush and Gordon, 1978; Guba, 1978; Guttentag, 1973; Rist, 1978; Rivlin, 1973; Stake, 1978).

7. Conclusions

This paper examines the emergence of subjective and critical approaches to the evaluation of educational reform. It argues that educational decision-makers, planners, and evaluators should be aware of the entire range of ideological and methodological perspectives on evaluation if they are to make well-informed, intelligent choices. The need to identify and clarify values and to develop comparative and dialectical evaluation models and approaches are also discussed.

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